

1. Record Nr.	UNINA9910450756103321
Titolo	The psychology of science text comprehension [[electronic resource] /] / edited by Jose Otero, Jose A. Leon, Arthur C. Graesser
Pubbl/distr/stampa	Mahwah, N.J., : L. Erlbaum Associates, 2002
ISBN	1-135-64717-8 1-282-37905-4 9786612379055 1-4106-1243-0
Descrizione fisica	1 online resource (472 p.)
Altri autori (Persone)	OteroJose LeonJose A GraesserArthur C
Disciplina	501/.9
Soggetti	Science - Study and teaching - Psychological aspects Science Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Contents; Preface; 1 Introduction to the Psychology of Science Text Comprehension; 2 Toward a Functional Analysis of Scientific Genres: Implications for Understanding and Learning Processes; 3 The Characteristics of Well-Designed Science Textbooks; 4 Visual Imagery in School Science Texts; 5 Generating and Understanding Qualitative Explanations; 6 Comprehension and Memory of Science Texts: Inferential Processes and the Construction of a Mental Representation; 7 Understanding Causality and Temporal Sequence in Scientific Discourse 8 Situation Models as Retrieval Structures: Effects on the Global Coherence of Science Texts 9 Predictive Inferences in Scientific and Technological Contexts; 10 Situated Regulation of Scientific Text Processing; 11 Metacomprehension of Science Text: Investigating the Levels-of-Disruption Hypothesis; 12 Noticing and Fixing Difficulties While Understanding Science Texts; 13 Updating Mental Representations During Reading Scientific Text; 14 Using Illustrations

to Promote Constructivist Learning From Science Text; 15
Understanding Machines From Multimedia and Hypermedia
Presentations

16 Toward an Integrative View of Text and Picture Comprehension:
Visualization Effects on the Construction of Mental Models17 ""Mining
for Meaning:"" Cognitive Effects of Inserted Questions in Learning From
Scientific Text; Author Index; Subject Index

Sommario/riassunto

This volume's goal is to provide readers with up-to-date information on the research and theory of scientific text comprehension. It is widely acknowledged that the comprehension of science and technological artifacts is very difficult for both children and adults. The material is conceptually complex, there is very little background knowledge for most individuals, and the materials are often poorly written. Therefore, it is no surprise that students are turned off from learning science and technology. Given these challenges, it is important to design scientific text in a fashion that fits the
